

I-75 to Golden Glades Interchange
Project Summary

The Palmetto Expressway is one of the most traveled transportation corridors in Miami-Dade County. This multi-lane expressway extends from US-1 to the Golden Glades Interchange (GGI) for a distance of approximately 25 miles. Within the project study limits, the Palmetto Expressway corridor is a six-lane divided limited access facility from SR 93/I-75 to NW 27th Avenue; and, from NW 27th Avenue, to the GGI, this corridor widens to an eight-lane divided expressway. From I-75 to NW 67th Avenue, a one-way northbound/eastbound frontage road runs along the east/south side of the corridor and from NW 67th Avenue to the



GGI, a one-way frontage road (NW 167th Street) runs along each side of the facility, providing access to businesses located along the corridor. The Palmetto Expressway provides system-level connections to I-75, Florida's Turnpike, and I-95. In addition, the Palmetto Expressway is designated as a Florida Intrastate Highway System (FIHS) and Strategic Intermodal System (SIS) facility.

The need for improvement along the Palmetto Expressway is a combination of highway safety and traffic operations deficiencies that exists along the corridor. The existing facility was designed in the early 1960s and much of its design criteria do not satisfy the current design and safety standards. Many segments of the mainline facility currently operate



at unacceptable levels of service during rush hour traffic conditions with some ramps backing up to the mainline and in many instances, impeding through traffic in the outside lane. Projections of future population and employment in the project area indicate that travel demand will continue to increase for years to come.

The Palmetto Expressway PD&E Study will evaluate traffic capacity, operational and safety improvements for the Palmetto Expressway, which could include Active Traffic Management and Intelligent Transportation System strategies, lane additions, managed lanes, major interchange modifications, and bus rapid transit. The study will determine the number and type of travel lanes and

interchange improvements required to accommodate anticipated traffic volumes and improve safety conditions throughout the project corridor. It is through this study process that various alternatives for minimizing impacts to the surrounding communities will be addressed through social, economic and environmental reviews.



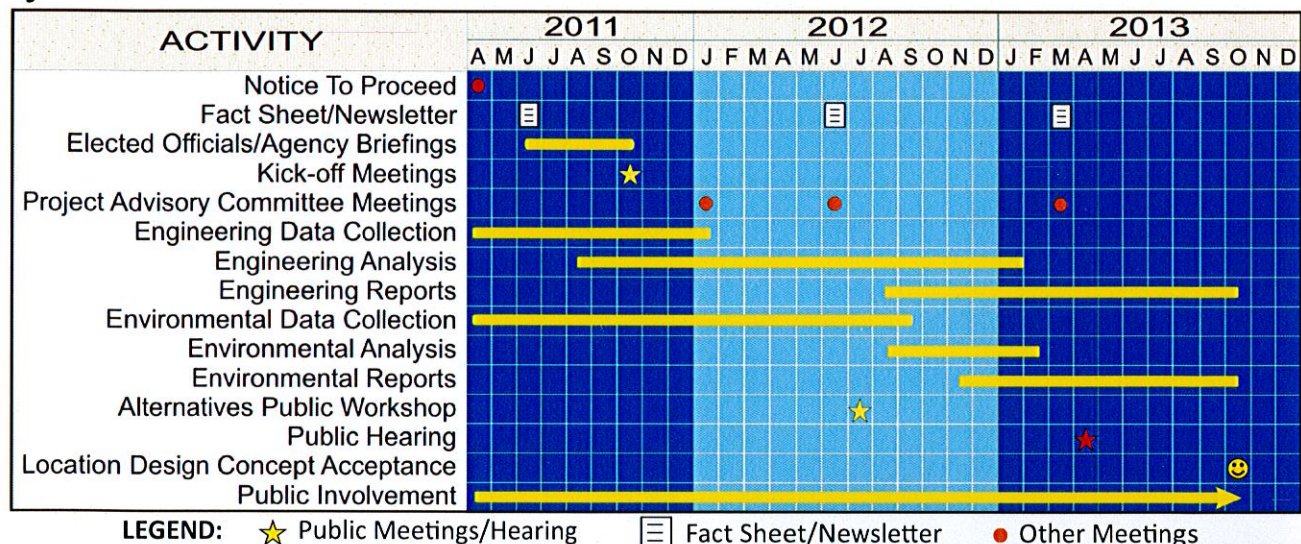
I-75 to Golden Glades Interchange

Community Outreach/Participation

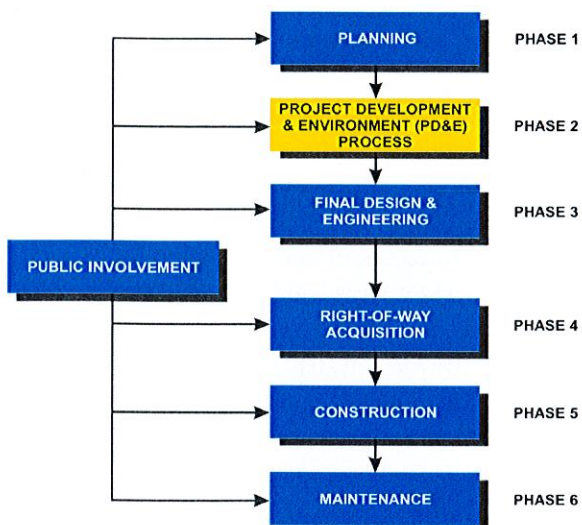
The goal of our Public Involvement Program is to inform and involve all interested residents and business owners of the project's development. Public involvement began in the summer of 2011 and will continue throughout the study. The public involvement process is designed to ensure public input in the development of the project alternatives by actively encouraging and facilitating the involvement of all the public including residents and business groups, elected and appointed officials, environmental resource agencies and other stakeholders. **Your input matters to us.**

The Florida Department of Transportation (FDOT) will provide several opportunities for your participation. Opportunities to comment include the project website, communication with project staff at any stage of the project, public meetings and community group presentations. Additionally, the project will have a Project Advisory Committee comprised of key representatives from the community to advise the Department. All opportunities will be announced on our project website. The PD&E Study is anticipated to be completed by fall 2013.

Project Schedule



PROJECT PHASES



CONTACT INFORMATION

For more information on the SR 826/Palmetto Expressway PD&E Study, please call, e-mail or write to:

Mr. Dat Huynh, P.E.
Project Manager

Florida Department of Transportation
District Six
Planning & Environmental Management Office
1000 NW 111th Avenue, Room 6111A,
Miami, Florida 33172
Phone: (305) 470-5217
Email: dat.huynh@dot.state.fl.us

To view Agency comments and project documents,
please visit:

<http://etdmpub.fl.a-etat.org>
ETDM Number: 11241

or
www.fdotmiamidade.com/palmettostudy



Palmetto Expressway PD&E Study

Traffic Noise Study Information

Financial Project ID: 418423-1-22-01

FAP No: 4751 146 P/ETDM No.: 11241



I-75 to Golden Glades Interchange

TRAFFIC NOISE EVALUATION PROCESS AND FREQUENTLY ASKED QUESTIONS

A typical transportation project will go through five phases of development:

- Planning
- Project Development and Environment (PD&E) Study
- Final Design
- Right of Way
- Construction

The Palmetto Expressway Project is currently in the PD&E Study Phase. During the PD&E Study, alignment alternatives are analyzed and a preferred alternative is selected. During the Final Design/Right of Way Phases, the preferred alternative is finalized, right of way needs are determined, and acquisition occurs. During the Construction Phase, the project is built.

The evaluation of traffic noise impacts associated with the project and the consideration of noise abatement measures occur during the PD&E Study Phase. Those abatement measures that are determined to be reasonable and feasible are recommended for public input and further consideration during the Final Design Phase. Also, **the Florida Department of Transportation (FDOT) commits to the construction of reasonable and feasible noise abatement measures at the locations affected by the project, contingent upon further analysis and community input during the Final Design Phase.** When final design plans are approximately 60 percent complete, engineering details are sufficient to allow a detailed assessment of an abatement measure. Following this detailed assessment and community input, feasible and reasonable abatement measures are then incorporated into the final design plans.



Florida Department of Transportation
District Six

The traffic noise impact study for the Palmetto Expressway PD&E Study is being performed using methodology approved by the FHWA and includes the following five steps:

Step 1: Identification of Noise Sensitive Sites

A land use survey is conducted to identify noise sensitive sites along the project corridor. Noise sensitive sites are defined as any property (owner occupied, rented or leased) where frequent human use occurs. Typical noise sensitive sites include residences, schools, churches, commercial properties with outdoor areas of use, and recreational areas.

Step 2: Determination of Traffic Noise Levels

A computer model is used to predict existing and future traffic noise levels at noise sensitive sites that may be affected by the project. Noise monitoring is conducted at representative sites to validate the model and determine if the computer model is accurately predicting noise levels.

Step 3: Determination of Traffic Noise Impacts

The predicted future traffic noise levels are compared to FHWA's Noise Abatement Criteria. Noise sensitive sites impacted by the project are those subjected to noise levels approaching or exceeding the FHWA's Noise Abatement Criteria, or where future noise levels with the project will result in a substantial increase over existing levels. For the typical outdoor noise sensitive site, noise levels approach the Noise Abatement Criteria when predicted levels reach 66 decibels [dB(A)]. A substantial increase is considered to occur when predicted noise levels are 15 dB(A) or more over existing noise levels as a direct result of the roadway project.

Step 4: Consideration of Noise Abatement Measures

When traffic noise impacts are identified, noise abatement is considered and evaluated for feasibility and reasonableness. At a minimum, noise barriers are evaluated. The feasibility of providing noise abatement is focused on the ability of the noise barrier to provide

TRAFFIC NOISE EVALUATION PROCESS AND FREQUENTLY ASKED QUESTIONS (Continued)

a reduction of at least 5 dB(A) to at least two impacted noise sensitive sites. Engineering constraints are also reviewed for fatal flaws that will not allow an abatement measure to be implemented.

The evaluation of reasonableness is guided by the FDOT's responsibility to use prudent judgment when considering the expenditure of public funds. The abatement measure must be cost effective and meet the FDOT's noise reduction design goal of 7.0 dB(A) at one or more benefited receptor sites. A reasonable cost of \$42,000 per benefited receptor is looked upon as the upper limit. A benefited receptor site is one that receives a noise reduction at or above the minimum threshold of 5 dB(A).

Step 5: Public Input and Commitments to Abatement Measures

Noise abatement measures determined to be both feasible and reasonable during the PD&E Study are recommended for further consideration and public input. In addition, FDOT makes a commitment to further evaluate these measures during the more detailed Final Design Phase of the project. The recommendations regarding the type, location, and dimension of noise barriers made during a PD&E Study are considered preliminary. The exact dimensions, including length and height and type of noise barrier, will be determined during the more detailed Final Design Phase and following input from adjacent property owners benefited by the recommended noise barrier. During the early stages of the Final Design Phase, these property owners will be surveyed to determine their desires regarding the type, height, and location of feasible noise barriers or abatement measures prior to FDOT making a final recommendation.

Frequently Asked Questions

What factors affect traffic noise?

Vehicle or traffic noise is a combination of the noises produced by the engine, exhaust, and tires. The level of

Please contact us with your comments or questions:

Mr. Dat Huynh, P.E.

District Project Development Engineer

Florida Department of Transportation

District Six

1000 NW 111th Avenue, Room 6111A

Miami, Florida 33172

Telephone: 305-470-5217

Email: Dat.Huynh@dot.state.fl.us

traffic noise depends primarily on (1) the volume of traffic, (2) the speed of traffic, (3) the number of trucks in the flow of traffic, and (4) the distance between the traffic and receptor site (such as a single family residence). In general, heavy traffic volumes, higher speeds, and greater numbers of trucks lead to more traffic noise. Conversely, the greater the distance between the traffic source and receptor, the lower the noise levels at the receptor site.

What types and heights of noise barriers are considered?

The types and locations of noise barriers generally considered include ground mounted and shoulder mounted. Ground mounted barriers are typically concrete post and panel noise walls and are usually constructed in the vicinity of the right of way line. Shoulder barriers are constructed along the outside edge of the roadway shoulder and typically are used on elevated sections because ground mounted noise barriers are often less effective in these areas. To effectively reduce traffic noise, ground mounted noise barrier heights typically range from 16 to 22 feet while shoulder mounted noise barriers typically range from 8 to 14 feet in height. Due to safety and constructability issues, the height of shoulder mounted barriers is limited to 14 feet except on mechanically stabilized earth (MSE) walls, where they are limited to 8 feet. In addition, a design variance is required for shoulder mounted barriers taller than 8 feet on bridges.

FDOT's Typical Ground Mounted Noise Barrier



FDOT's Typical Shoulder Mounted Noise Barrier

